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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|--|----------------------|-----------------------|------------------|
| 10/822,883 | 04/13/2004 | Kenneth Merdan | 1001.1748101 | 4001 |
| 28075 · | 7590 04/18/2007 SEAGER & TUFTE, LLC | EXAMINER | | |
| 1221 NICOLL | | | ELVE, MARIA ALEXANDRA | |
| SUITE 800 MINNEAPOLIS, MN 55403-2420 | | | ART UNIT . | . PAPER NUMBER |
| Will Will Dail O.D. | | | 1725 | |
| | | | | |
| SHORTENED STATUTOR | RY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE | |
| 3 MONTHS | | 04/18/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | Application No. | Applicant(s) | | | | |
|---|---|---|---|--|--|--|--|
| Office Action Summary | | 10/822,883 | MERDAN ET AL. | | | | |
| | | Examiner | Art Unit | | | | |
| | - | M. Alexandra Elve | 1725 | | | | |
| | The MAILING DATE of this communication app | | | | | | |
| Period fo | | | | | | | |
| WHIC - Exter after - If NO - Failu Any | ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANS INSIGNS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tirr vill apply and will expire SIX (6) MONTHS from 1, cause the application to become ABANDONE | I. lely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | | |
| Status | | | | | | | |
| 1)⊠ | Responsive to communication(s) filed on 31 Ja | nuary 2007. | | | | | |
| ′= | This action is FINAL . 2b)⊠ This action is non-final. | | | | | | |
| 3) | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Dispositi | ion of Claims | | | | | | |
| 4)⊠ | Claim(s) <u>1-27</u> is/are pending in the application. | | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) | Claim(s) is/are allowed. | | | | | | |
| | Claim(s) <u>1-27</u> is/are rejected. | | | | | | |
| · | Claim(s) is/are objected to. | | | | | | |
| . 8)∐ | Claim(s) are subject to restriction and/or | r election requirement. | | | | | |
| Applicati | ion Papers | | | | | | |
| 9) | The specification is objected to by the Examine | r. | | | | | |
| 10)🛛 | The drawing(s) filed on 13 April 2004 is/are: a) | ☑ accepted or b)☐ objected to l | by the Examiner. | | | | |
| | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | |
| Priority (| ınder 35 Ü.S.C. § 119 | | ·. | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| Attachmen | t(s) | | | | | | |
| | e of References Cited (PTO-892) | 4) Interview Summary | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date Notice of Informal Patent Application | | | | | | | |
| Paper No(s)/Mail Date 6) Other: | | | | | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 6-8, 11-16, 18-19, 21-23 & 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Acciai et al. (USPN 5,855,802) in view of Pacetti et al. (USPN 6,695,920).

Acciai et al. discloses a method and apparatus for forming a tubular article having a perforated annular wall, such as a surgical stent. Figure 3 shows a laser (40), a fiber optic (44), a beam splitter (42) and an optical guide (46). Note that the laser beam moves partially in a horizontal direction in the fiber optic and horizontally in the optical guide. The tubular member (32) is mounted in a chuck (34). The laser beams are focused by focusing mirrors (56 & 58) mounted at 45° (tuning mirror). The apparatus is supported by a precision table (66) and a table (68). The tubular member is rotated by a rotating means (36), powered by a rotary drive motor (38). The tubular member is moved in a horizontal (translational) direction by means of a linear drive motor (70). The laser beams (60 & 62) cut the tubular member, in this case a stent.

a granite base and a radiopaque workpiece.

Acciai et al. does not teach all the elements mounted to one table, the coupling of the linear and rotary motors, the presence of guides, the workpiece below the motor(s),

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Pacetti et al. discloses a mandrel apparatus for supporting a stent. The stent is connected to a rotational motor (24) and another motor (28), which provides linear directional motion (back and forth along a rail). In addition, gears members (22) (guides) and a rail (30) provide guide members.

It would have been obvious to one of ordinary skill in the art at the time of the invention to couple the motor(s) and provide guides (gear members for stent support and rails), as taught by Pacetti et al. in the Acciai et al. system because coupling the motors minimizes manufacturing real estate and guides support components and provides articles for motion.

Making elements integral was held to have been obvious. In re Wolfe 116 USPQ 443. Reversal of parts was held to have been obvious. In re Gazda 104 USPQ 400. Rearrangement of parts was held to have been obvious. In re Japikse 86 USPQ 70. The type of materials chosen is a choice in design and substitution of known equivalent structures (table for granite or radiopaque workpiece) has been held obvious. In re Kuhle 188 USPQ (CCPA 1975), In re Ruff 118 USPQ 343 (CCPA 1958).

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Claims 5, 9, 17, 20 & 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Acciai et al. and Pacetti et al., as stated above and further in view of Tessier et al. (USPN 5,073,694).

Acciai et al. and Pacetti et al. do not teach the use of coolant in the cutting system.

Tessier et al. discloses laser cutting of a hollow metal workpieces. Coolant is pumped through the apparatus to contact the inner portion of the workpiece before and during laser cutting.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use a coolant as taught by Tessier et al. in the Acciai et al. and Pacetti et al. system because it ensures a cleaner finished product.

Making elements integral was held to have been obvious. In re Wolfe 116 USPQ 443. Reversal of parts was held to have been obvious. In re Gazda 104 USPQ 400. Rearrangement of parts was held to have been obvious. In re Japikse 86 USPQ 70. The type of materials chosen is a choice in design and substitution of known equivalent structures (table for granite) has been held obvious. In re Kuhle 188 USPQ (CCPA 1975), In re Ruff 118 USPQ 343 (CCPA 1958).

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Alexandra Elve whose telephone number is 571-272-1173. The examiner can normally be reached on 6:30-3:00 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

April 14, 2007.

M. Alexandra Elve

Primary Examiner 1725